

Application

File System

Logical Volume
Manager

Physical Storage System

FIG. 1 (PRIOR ART)

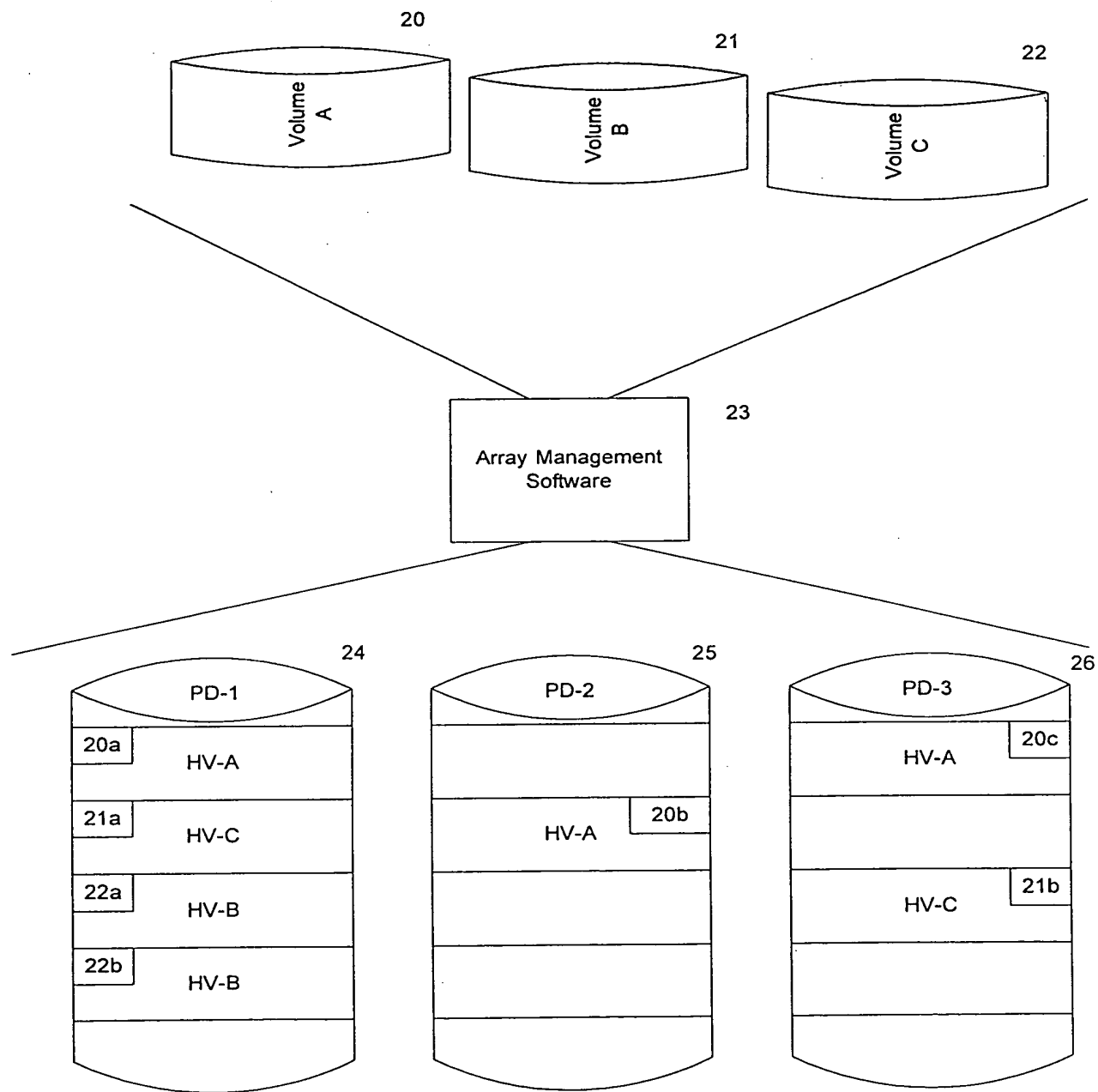


FIG. 2A (PRIOR ART)

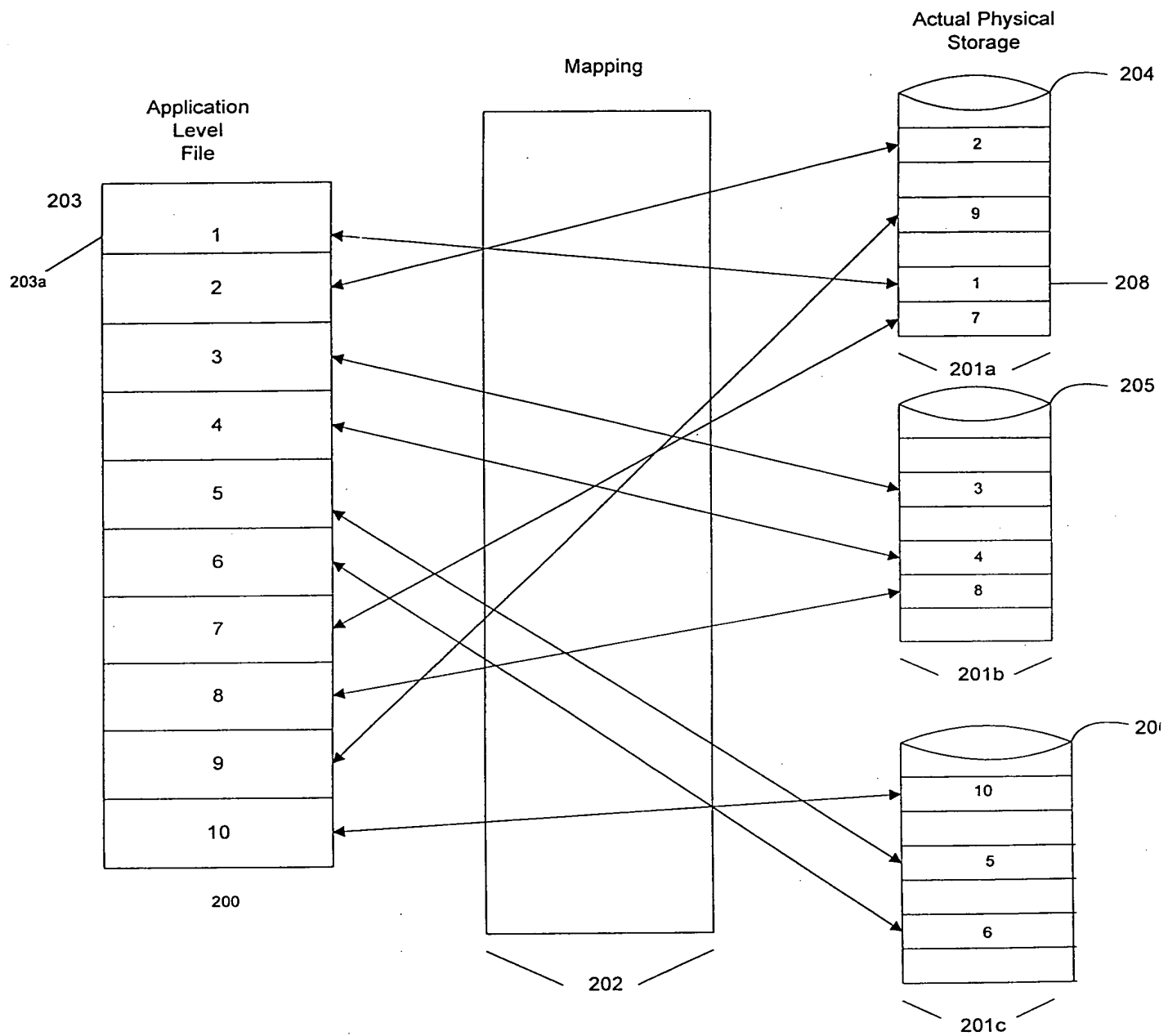


FIG. 2B

LO

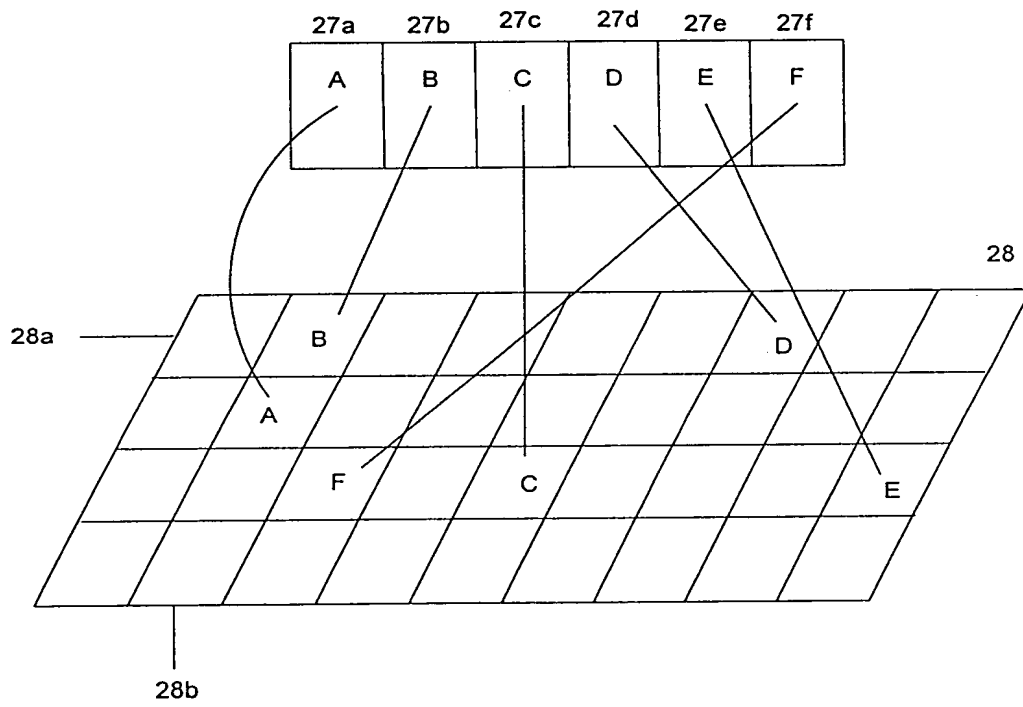


FIG. 2C

FIG. 3A PRIOR ART

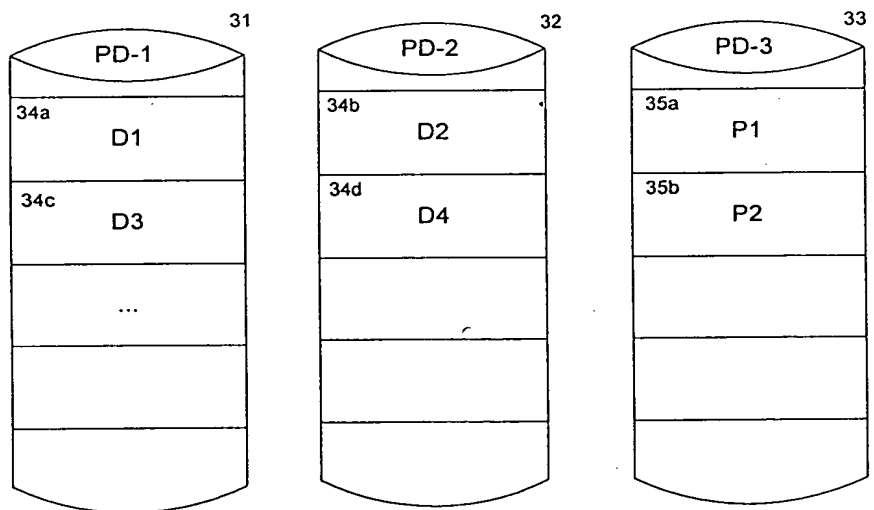


FIG. 3B PRIOR ART

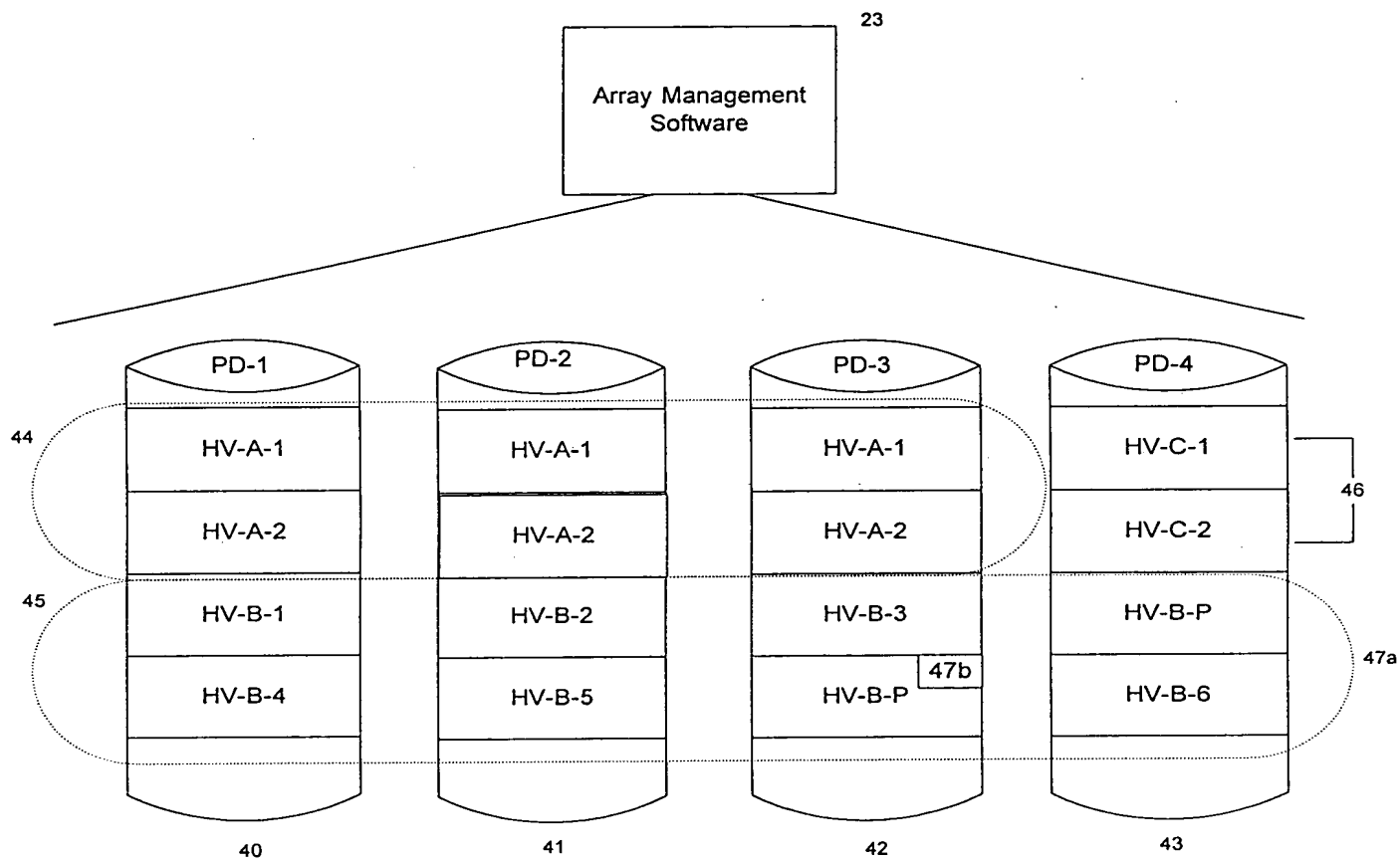


FIG. 4 (PRIOR ART)

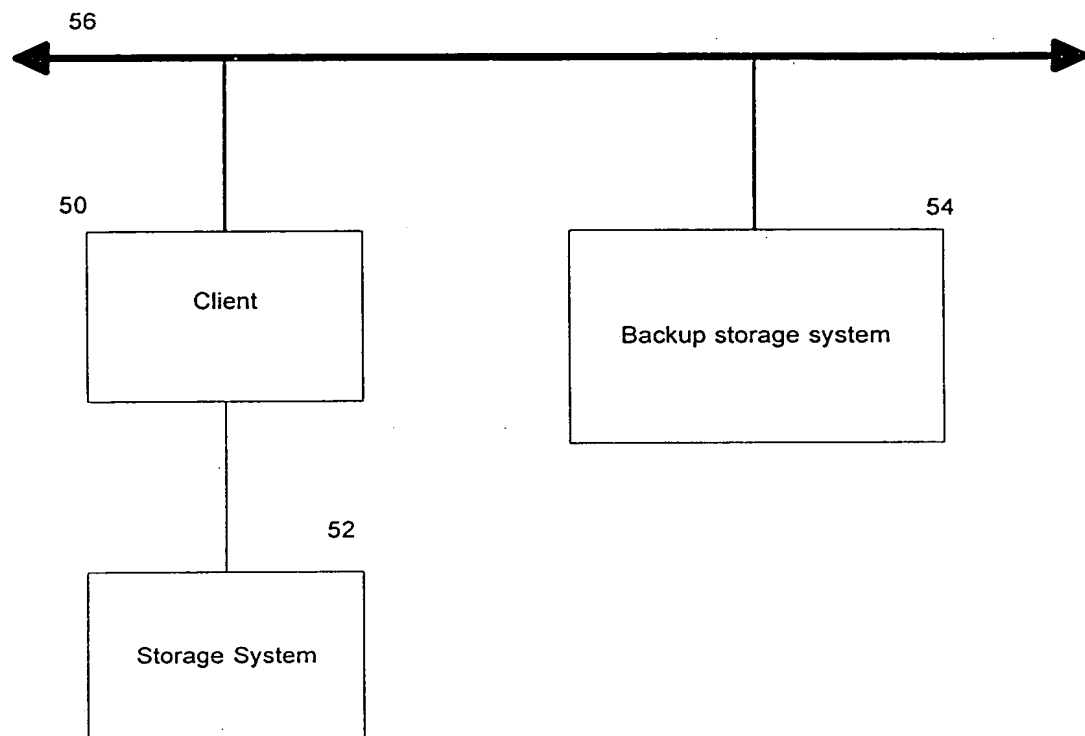


FIG. 5

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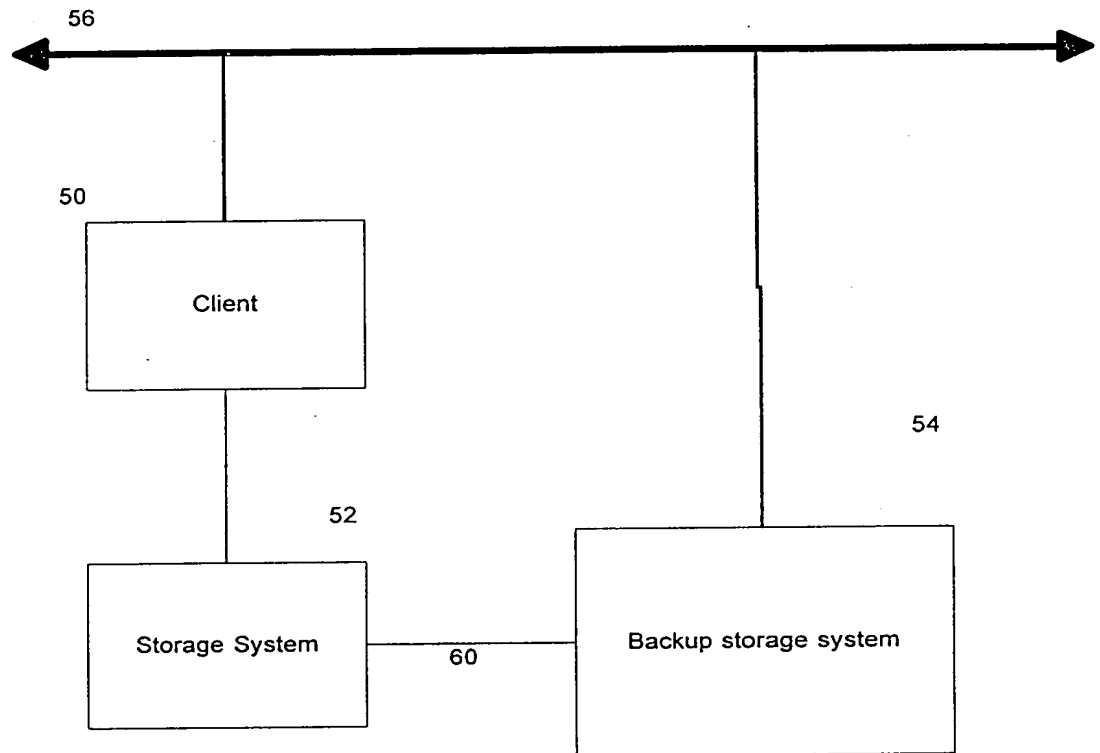
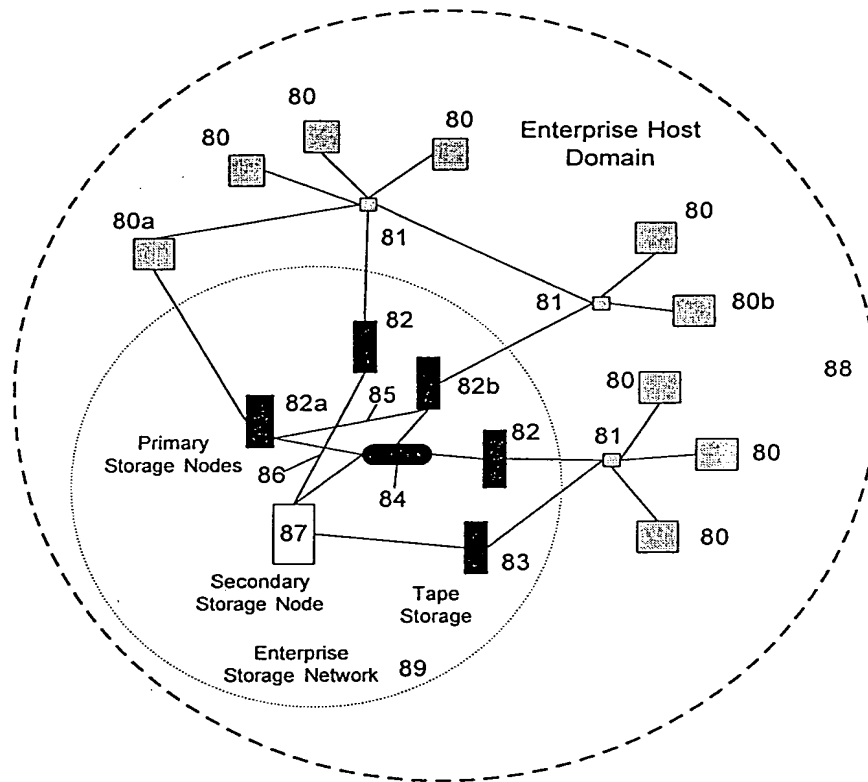


FIG. 6

The diagram illustrates a data storage system architecture. A central horizontal bus, labeled 73, connects several components. On the left, a bracket labeled 74 groups a 'CACHE' (74a) and an 'M-BOX' (74b). Above the bus, a 'HOST ADAPTER' (72) is connected to a vertical line that leads to a double-headed arrow labeled 71, representing a connection to a host. To the right of the host adapter is a 'REMOTE ADAPTER' (78), which is connected to a 'SERVICE PROCESSOR' (77) via an 'RDF Link' (79). Below the bus, four 'DISK ADAPTER' units (75a, 75b, 75c, 75d) are connected. Each disk adapter is linked to a corresponding 'PD' (Physical Disk) unit: 75a to PD-1 (76a), 75b to PD-2 (76b), 75c to PD-3 (76c), and 75d to PD-4 (76d). The entire system is enclosed in a dashed rectangular boundary labeled 70.

FIG. 7



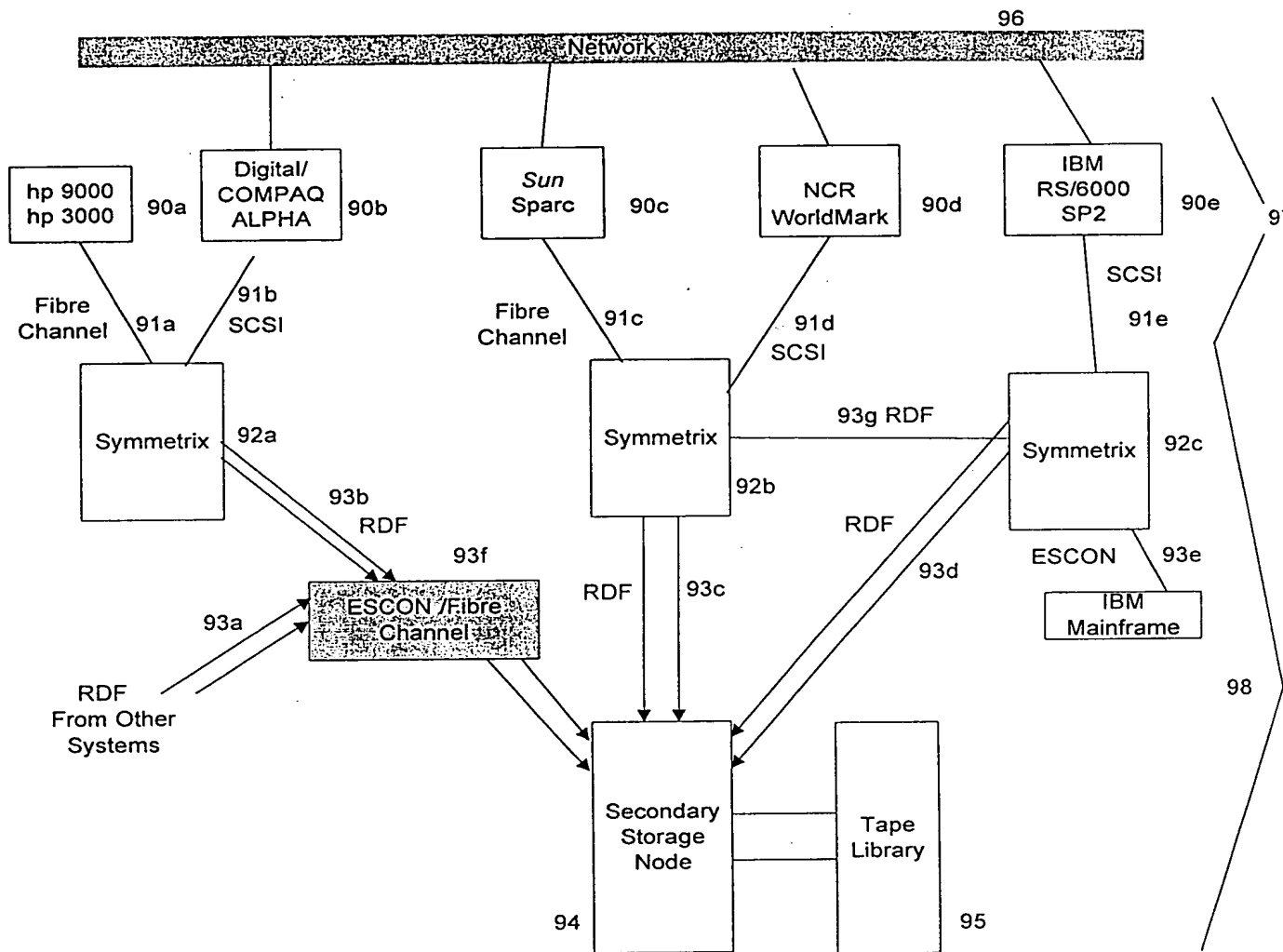


FIG. 9

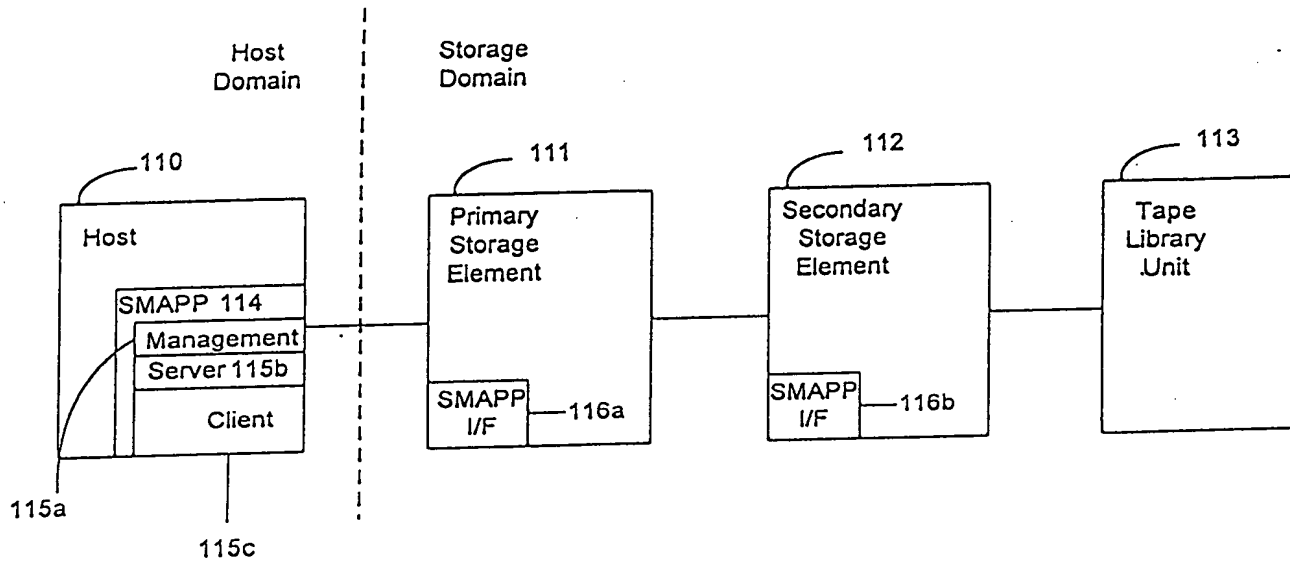


FIG. 10

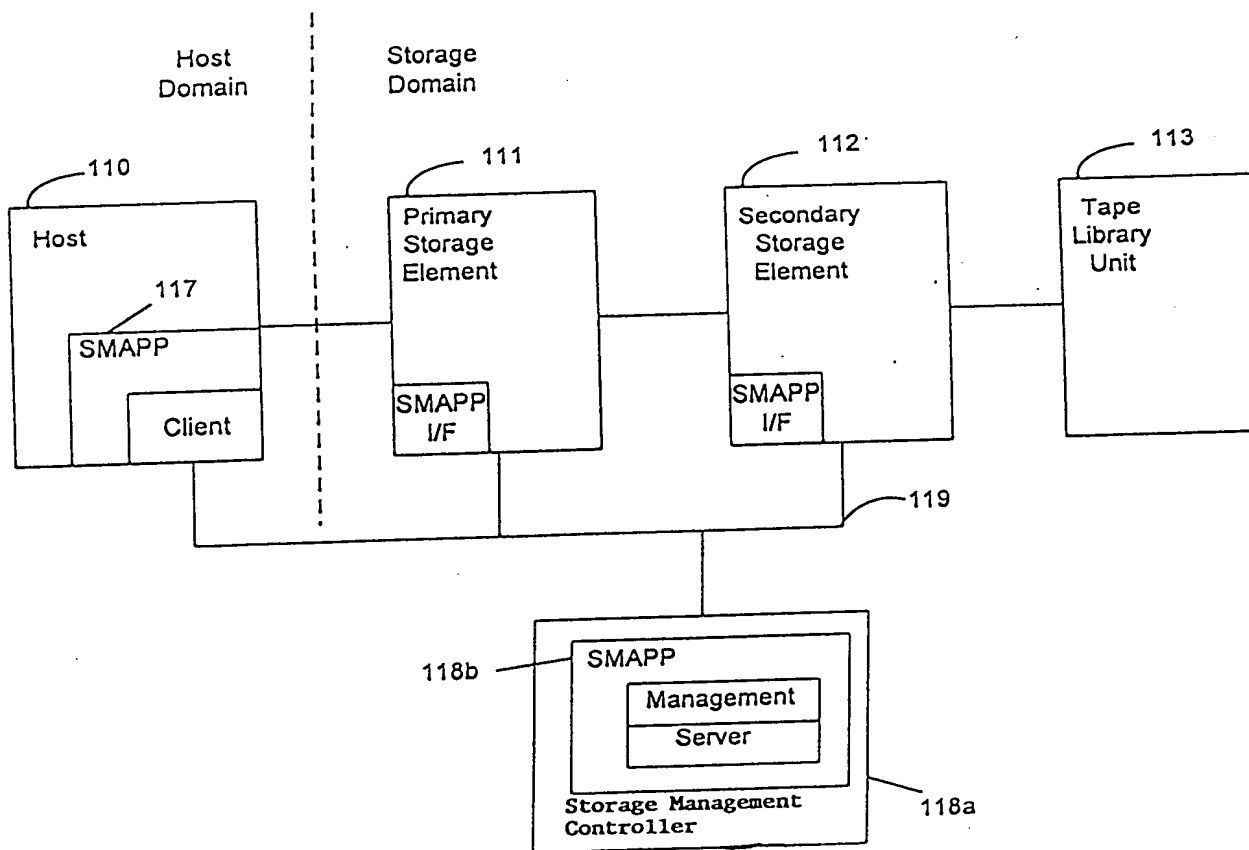


FIG. 11

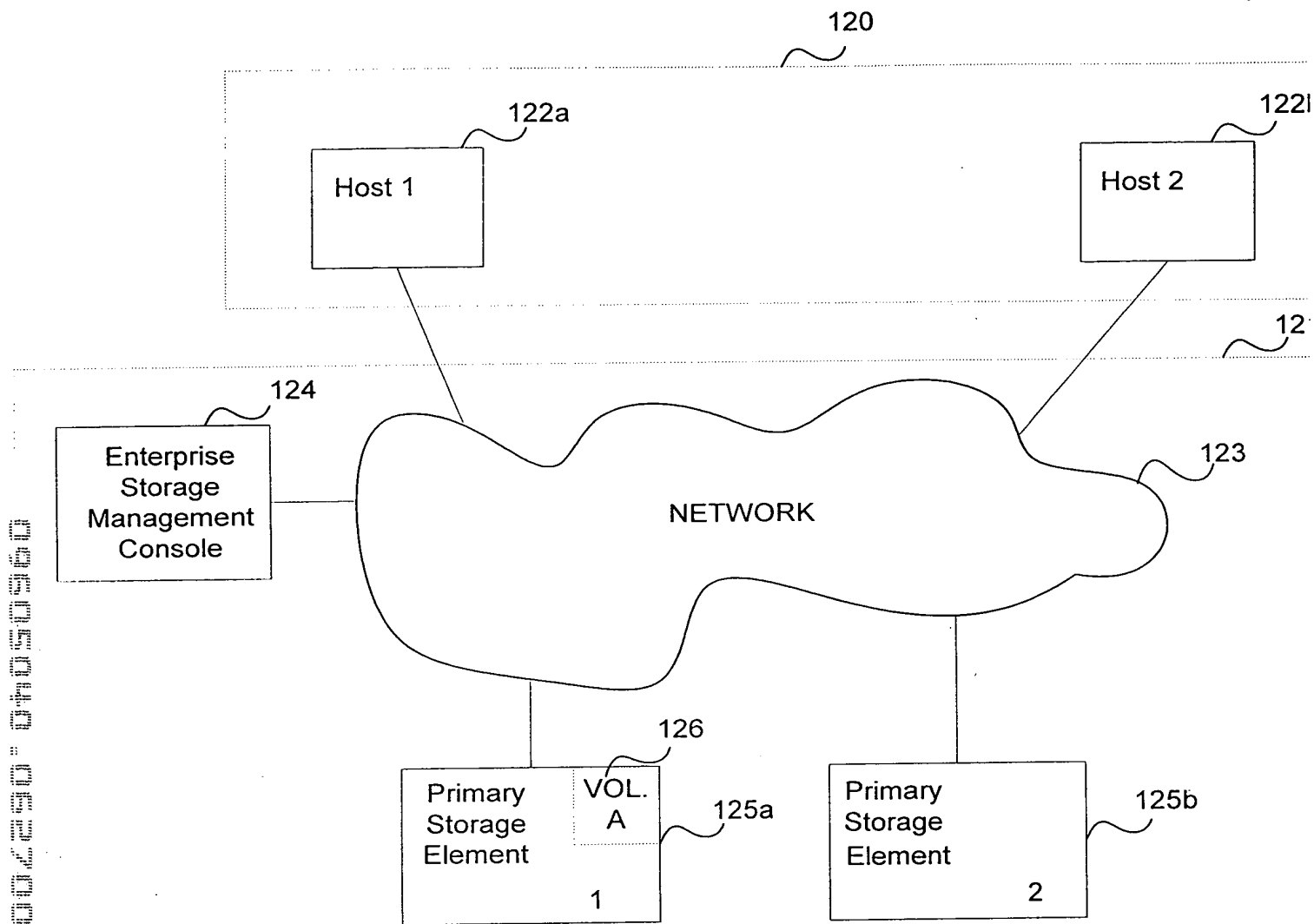


FIG. 12

Abstract

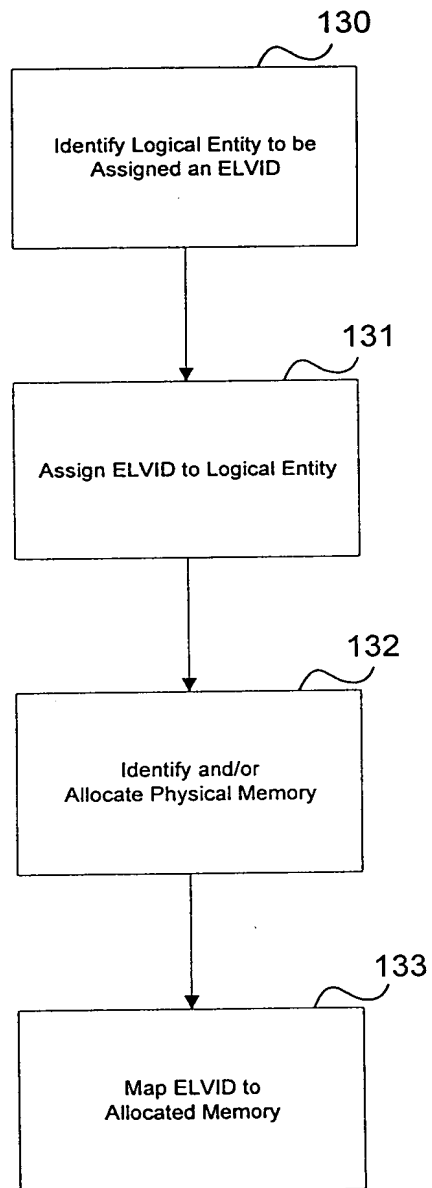


FIG. 13

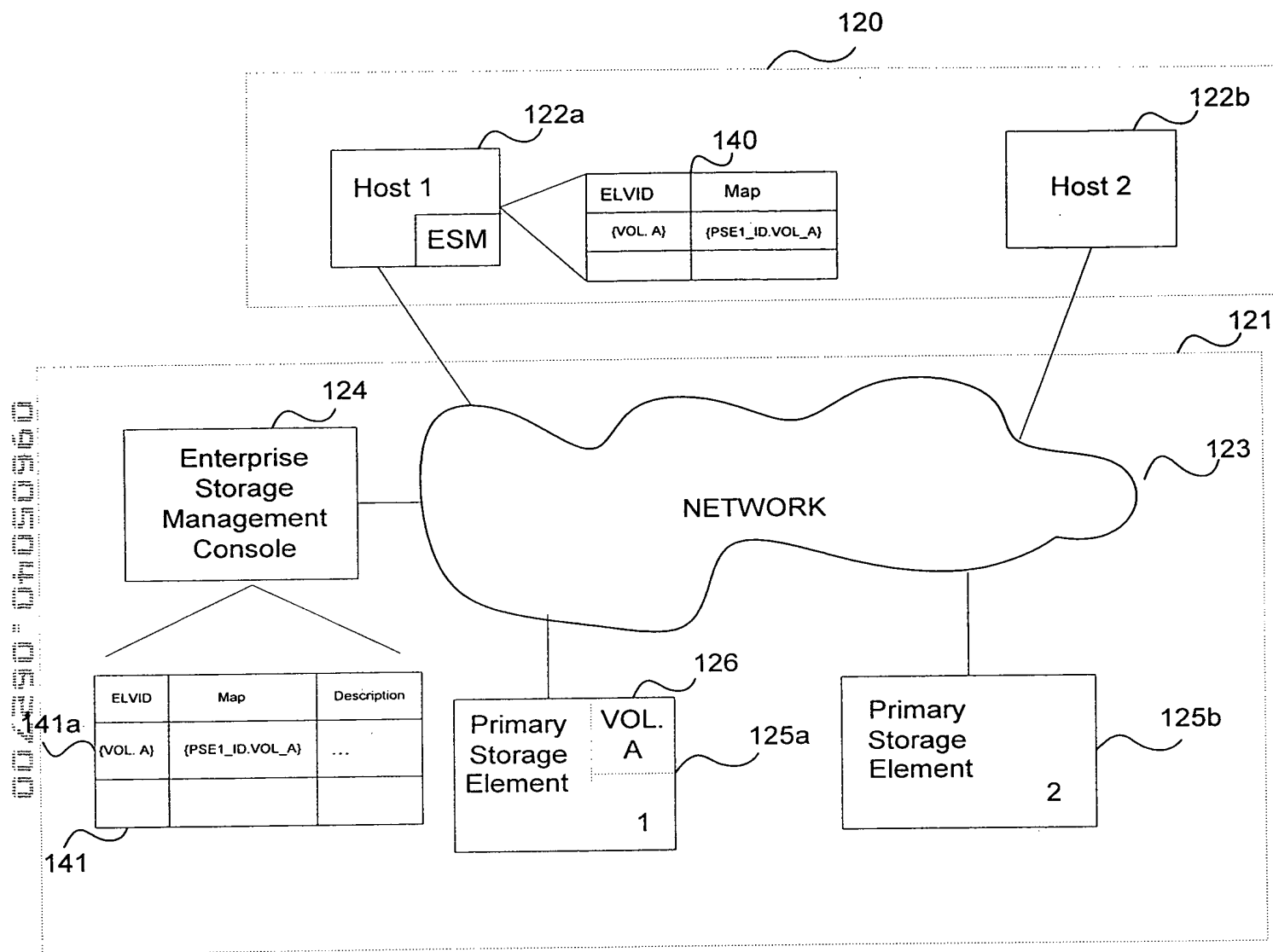


FIG. 14

CONCLUSIONS

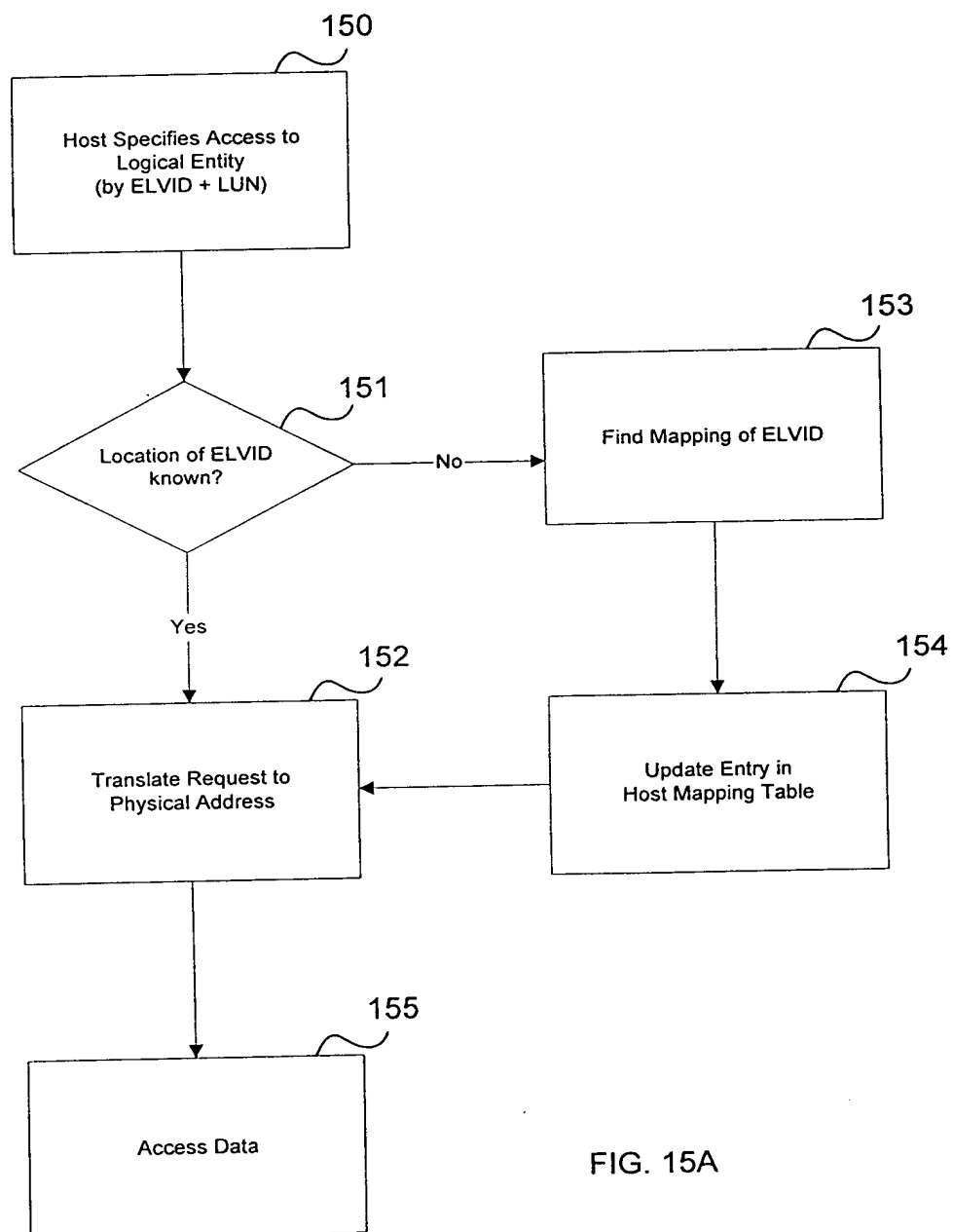
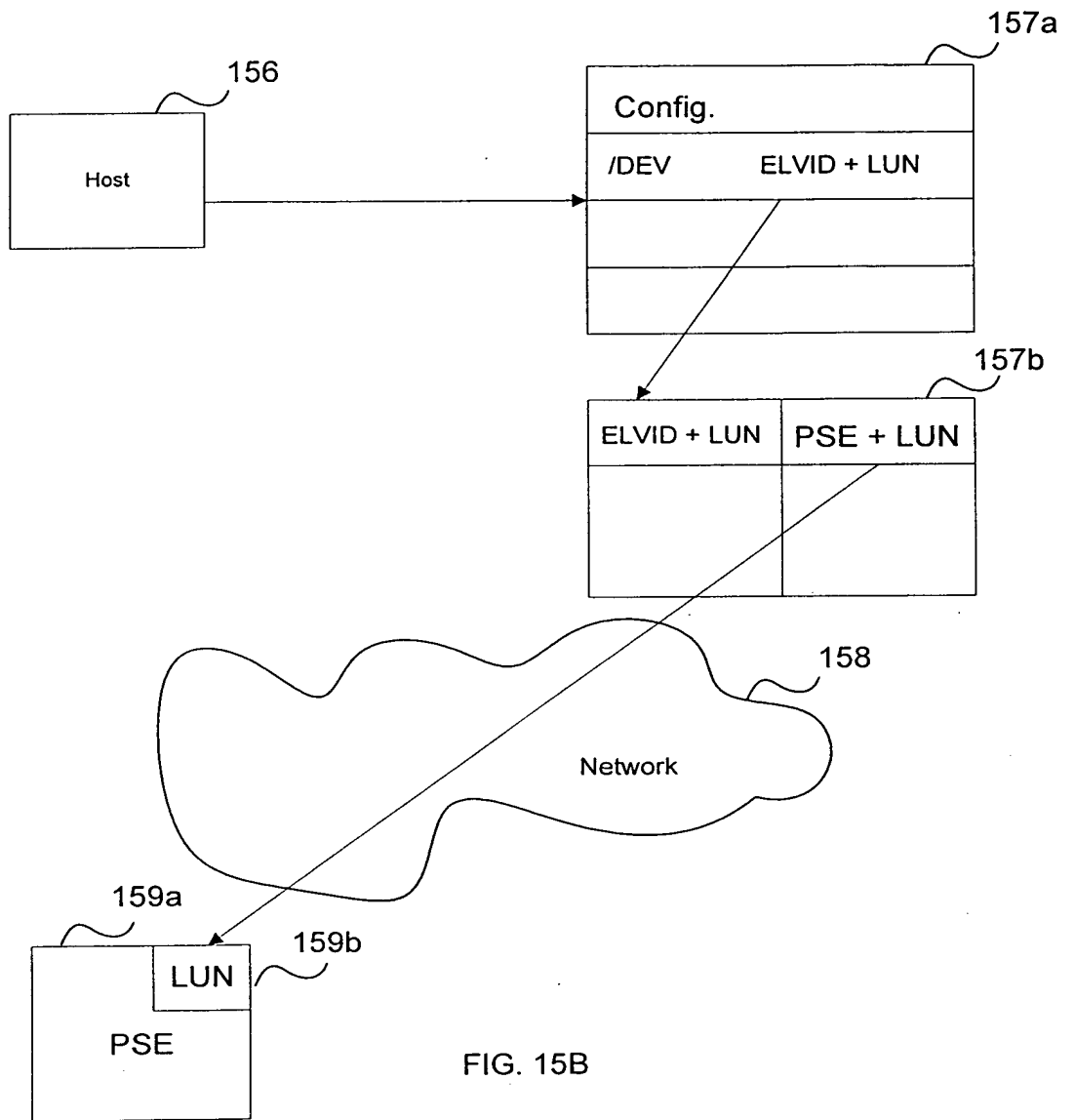


FIG. 15A



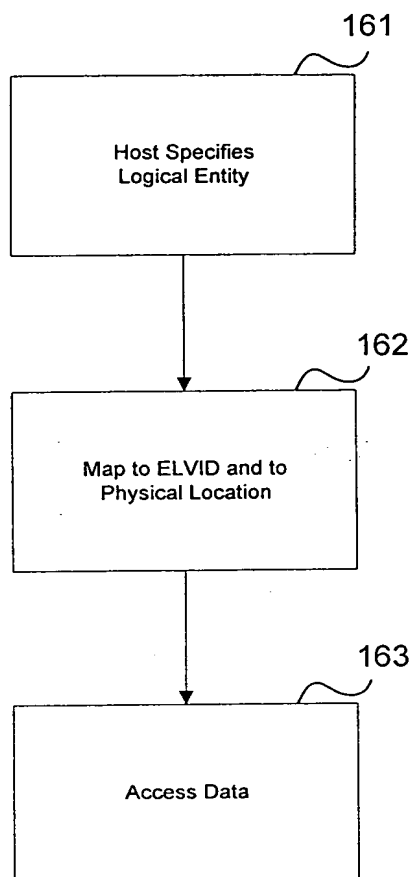
[illegible]

FIG. 16

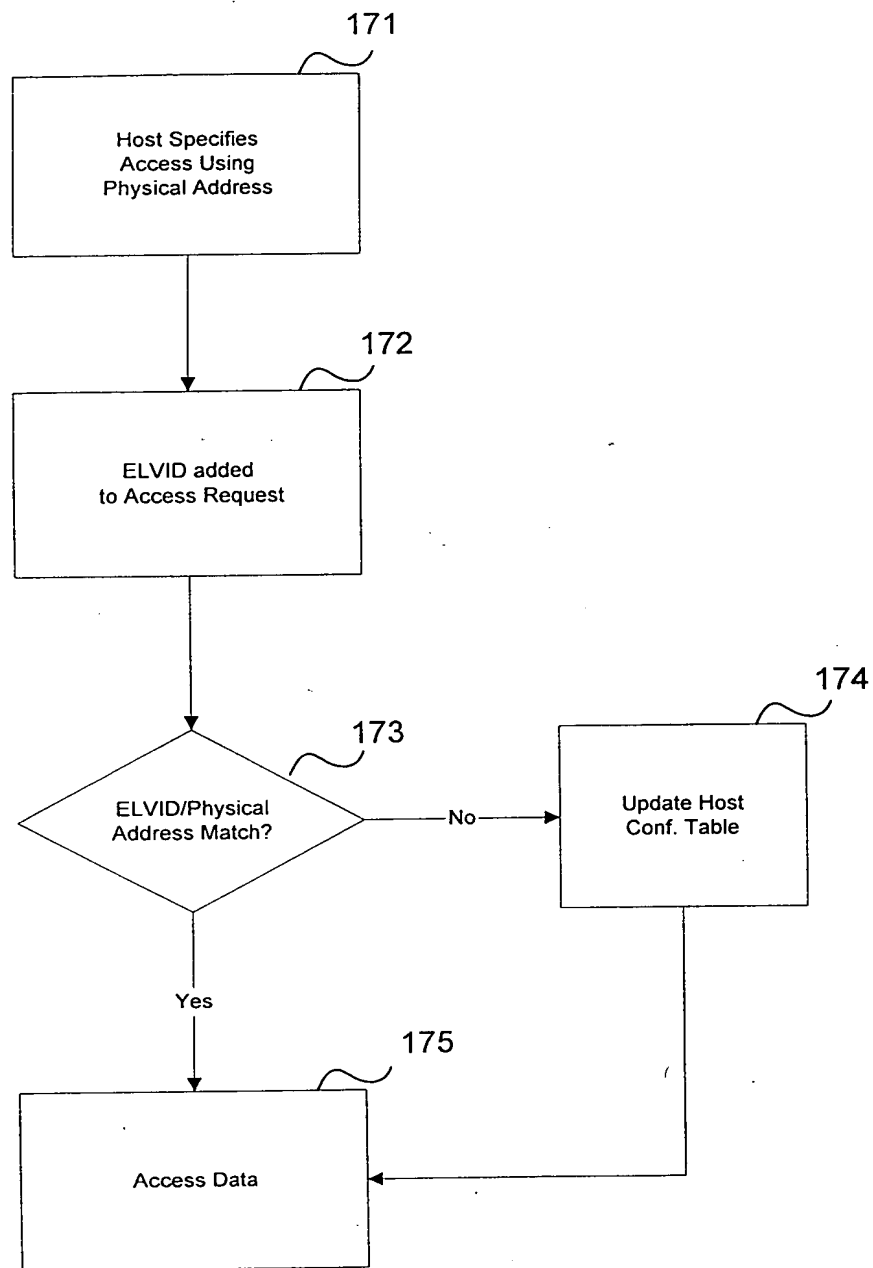


FIG. 17

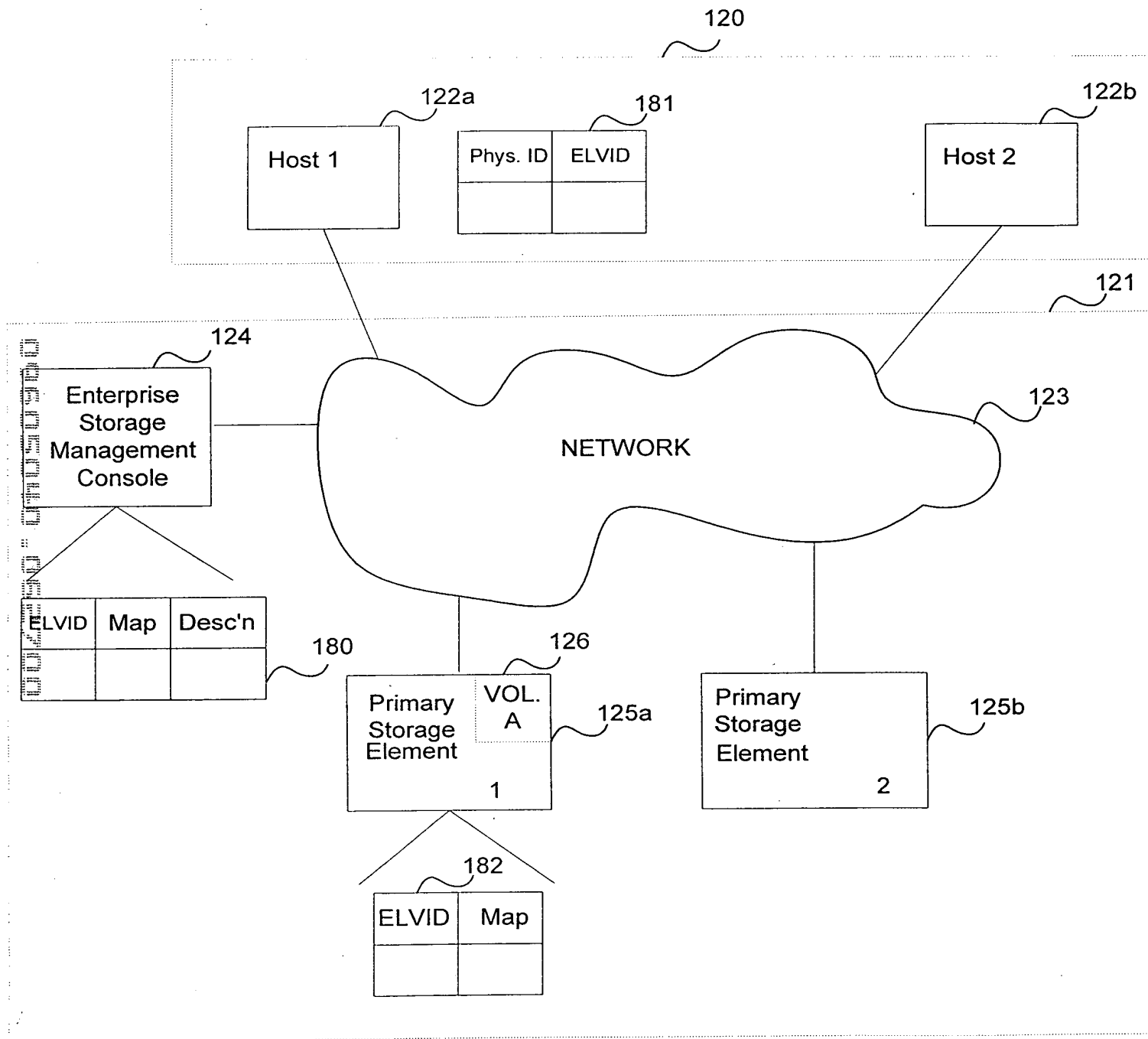


FIG. 18

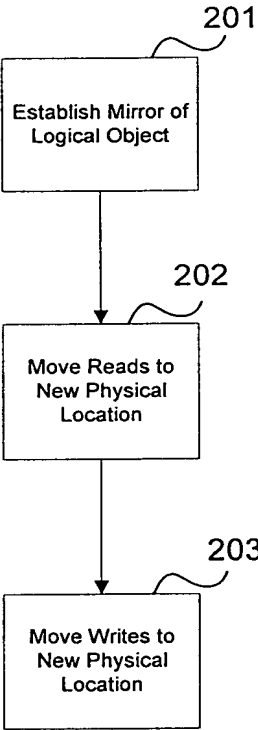
[illegible]

FIG. 20

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graph TD
    210[Host 210] -- W --> 212[PSE 212]
    210 -- R --> 213[PSE 213]
    211[Host 211] -- R --> 213
    211 -- W --> 212
    212 -- RDF --> 213
  
```

The diagram illustrates a data transfer system. It consists of two Hosts, labeled 210 and 211, and two PSEs, labeled 212 and 213. Host 210 is connected to PSE 212. Host 211 is connected to PSE 213. Both connections are labeled 'R/W', indicating read/write data transfer. The connections are shown as arrows pointing from the Hosts to the PSEs.

FIG. 21C

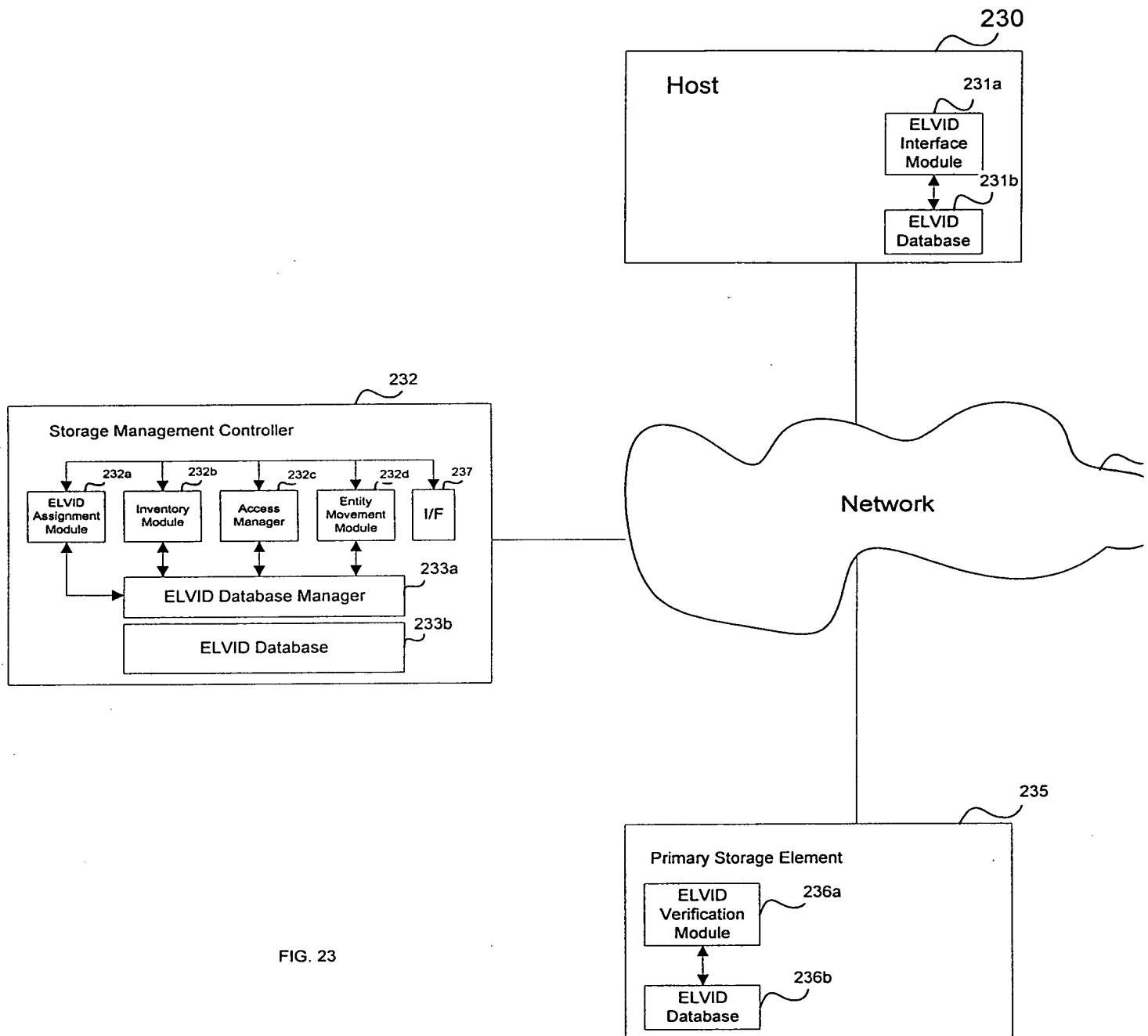


FIG. 23